

Figure 1

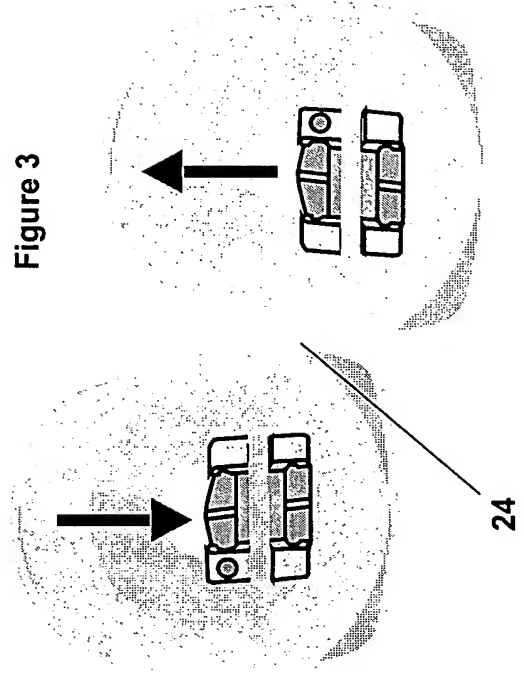
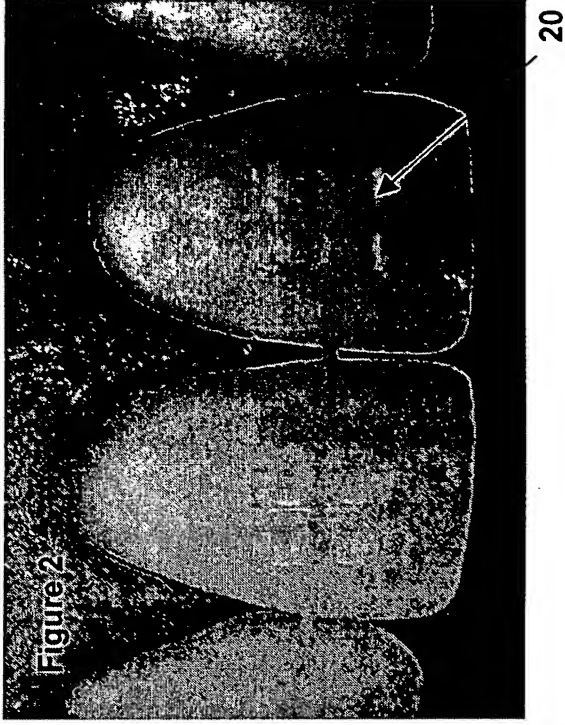


Figure 3

Figure 5a

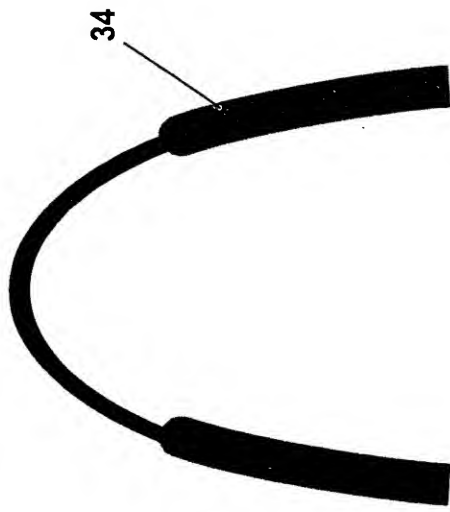


Figure 5b

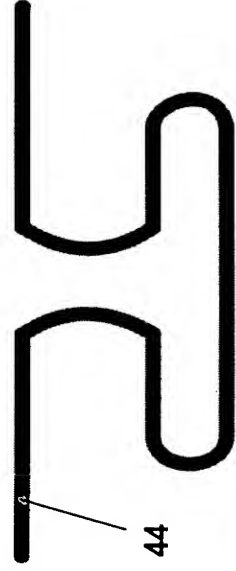


Figure 6

Figure 4d

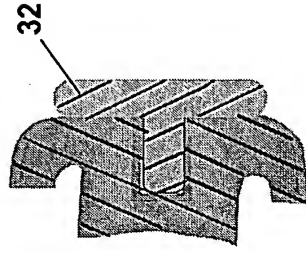


Figure 4c

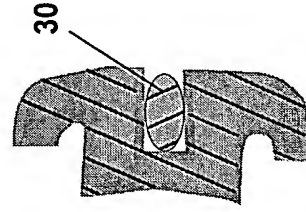


Figure 4b

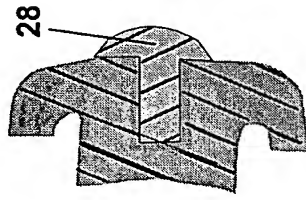


Figure 4a

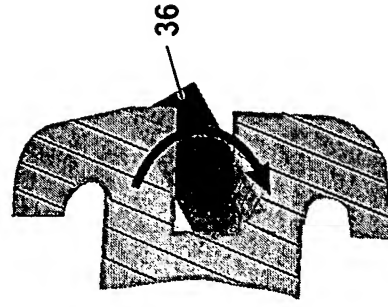
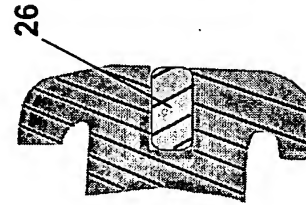


Fig. 7

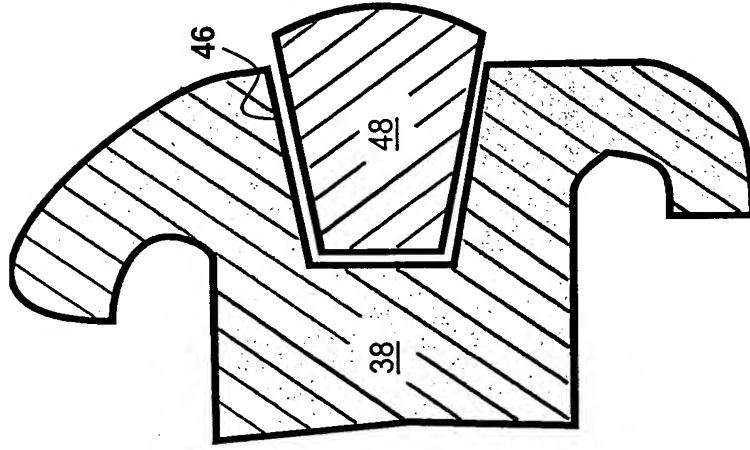
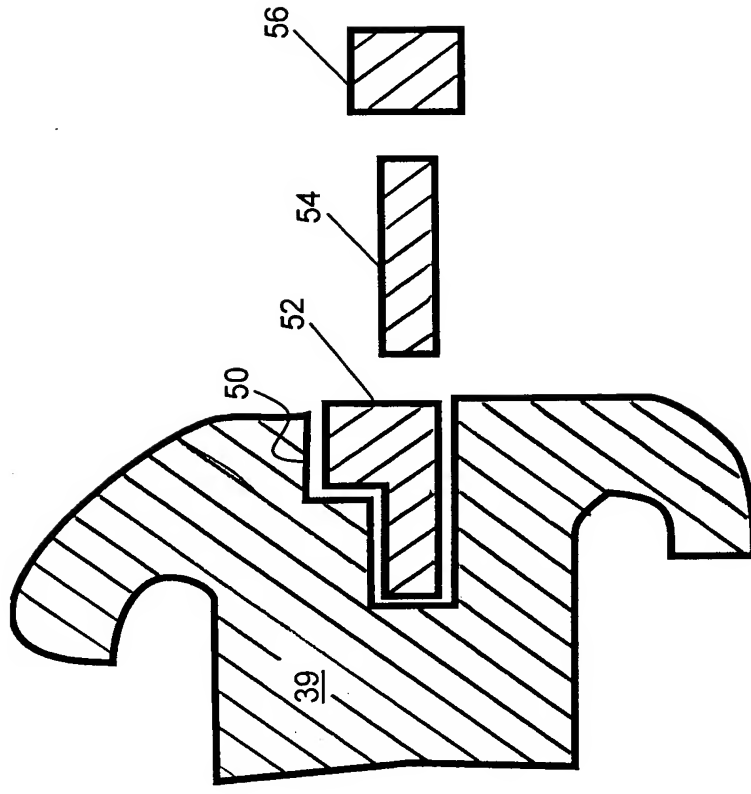


Fig. 8



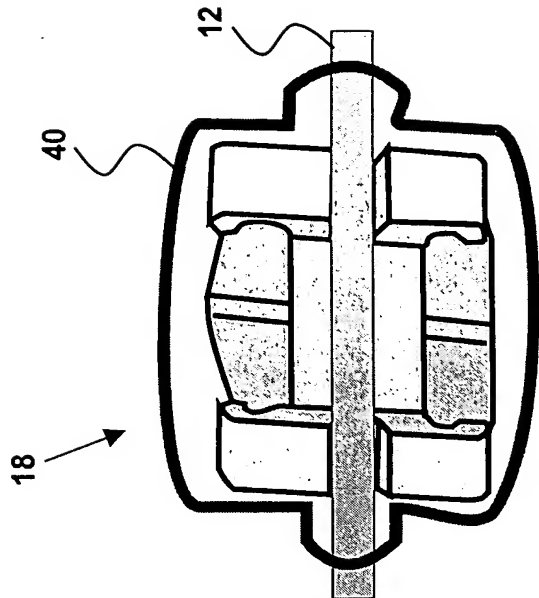


Figure 11

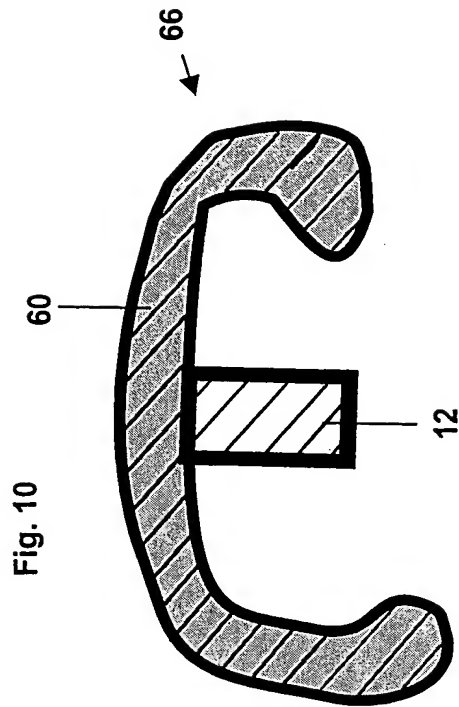


Fig. 10

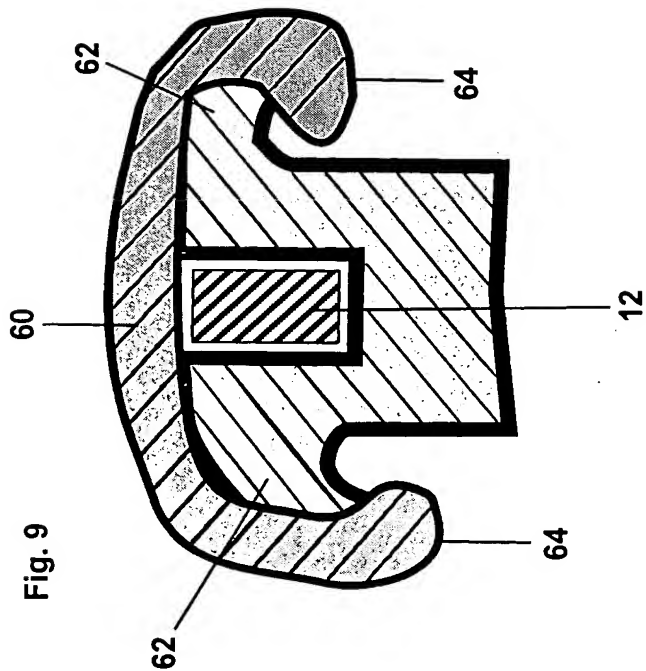


Fig. 9

Figure 12a

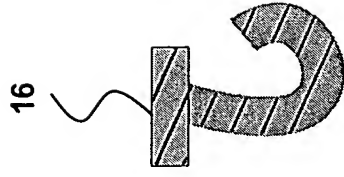
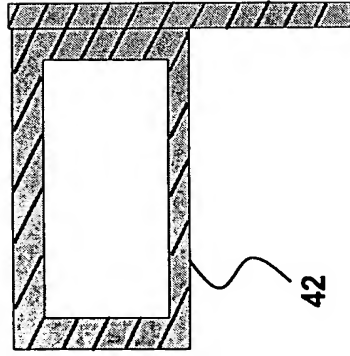


Figure 13

Figure 12b

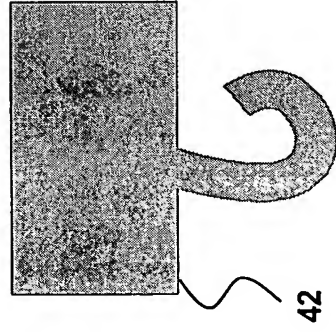
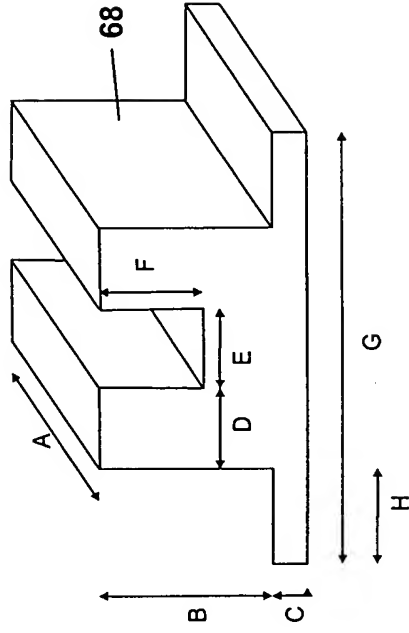


Figure 14



A = 3.0 mm (0.118 in)  
 B = 2.0 mm (0.079 in)  
 C = 0.61 mm (0.024 in)  
 D = 0.51, 0.99, 1.50, 2.01 mm (0.020, 0.039, 0.059, 0.079 in)  
 E = 0.56 mm (0.022 in)  
 F = 1.40 mm (0.055 in)  
 G = 5.49 mm (0.216 in)  
 H depends on value of D

Torque Twist Rate (Stiffness)

Figure 15

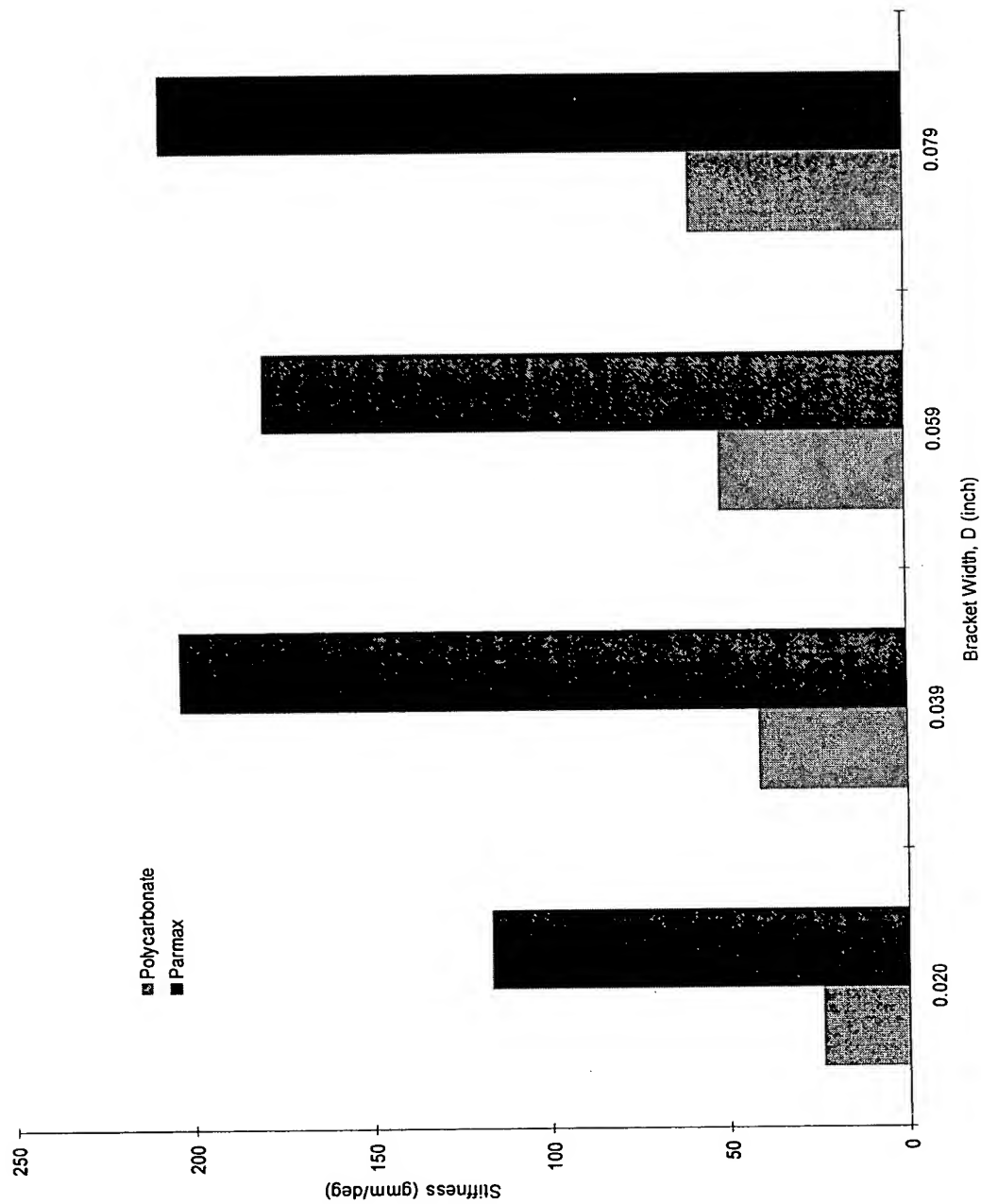
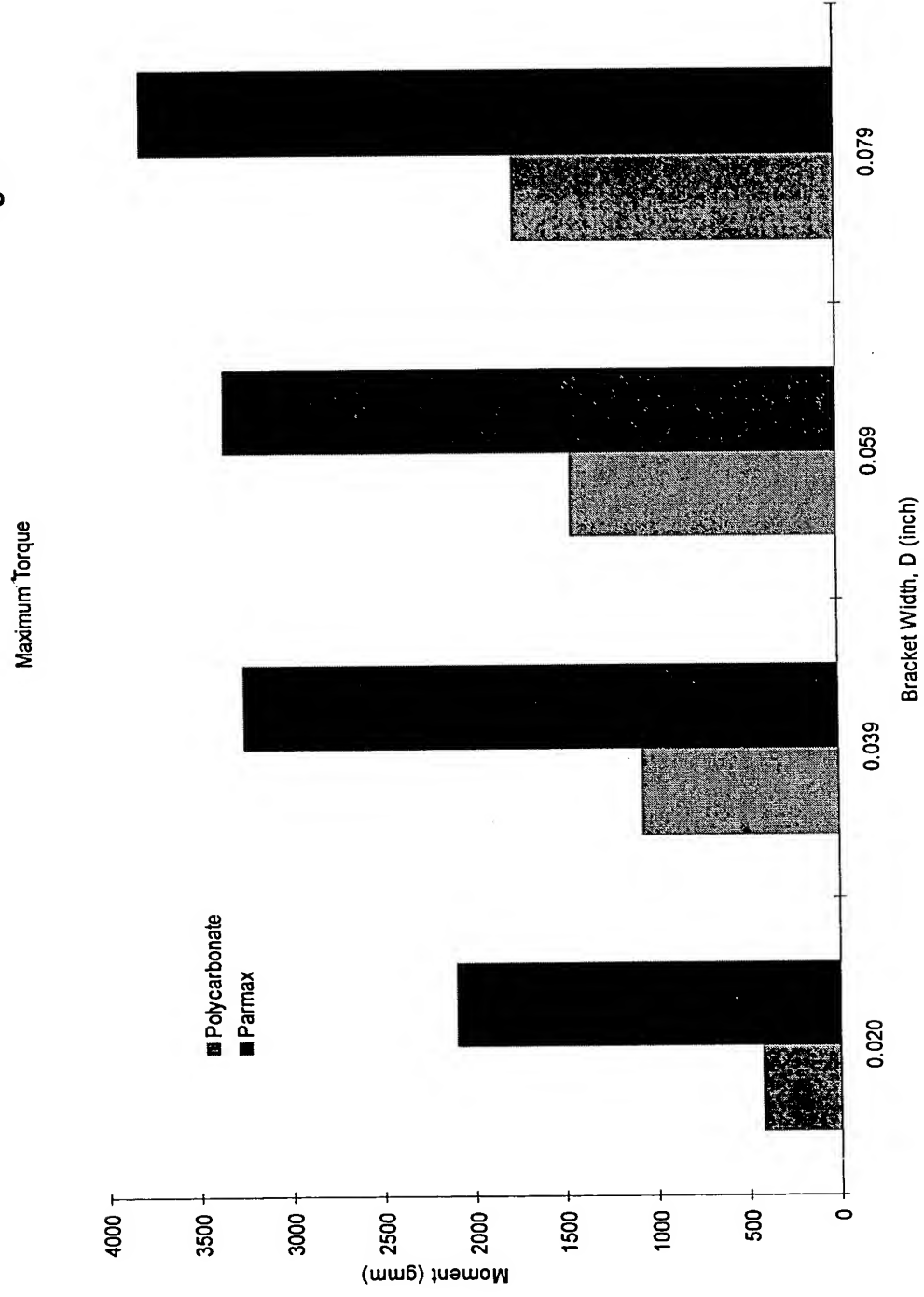
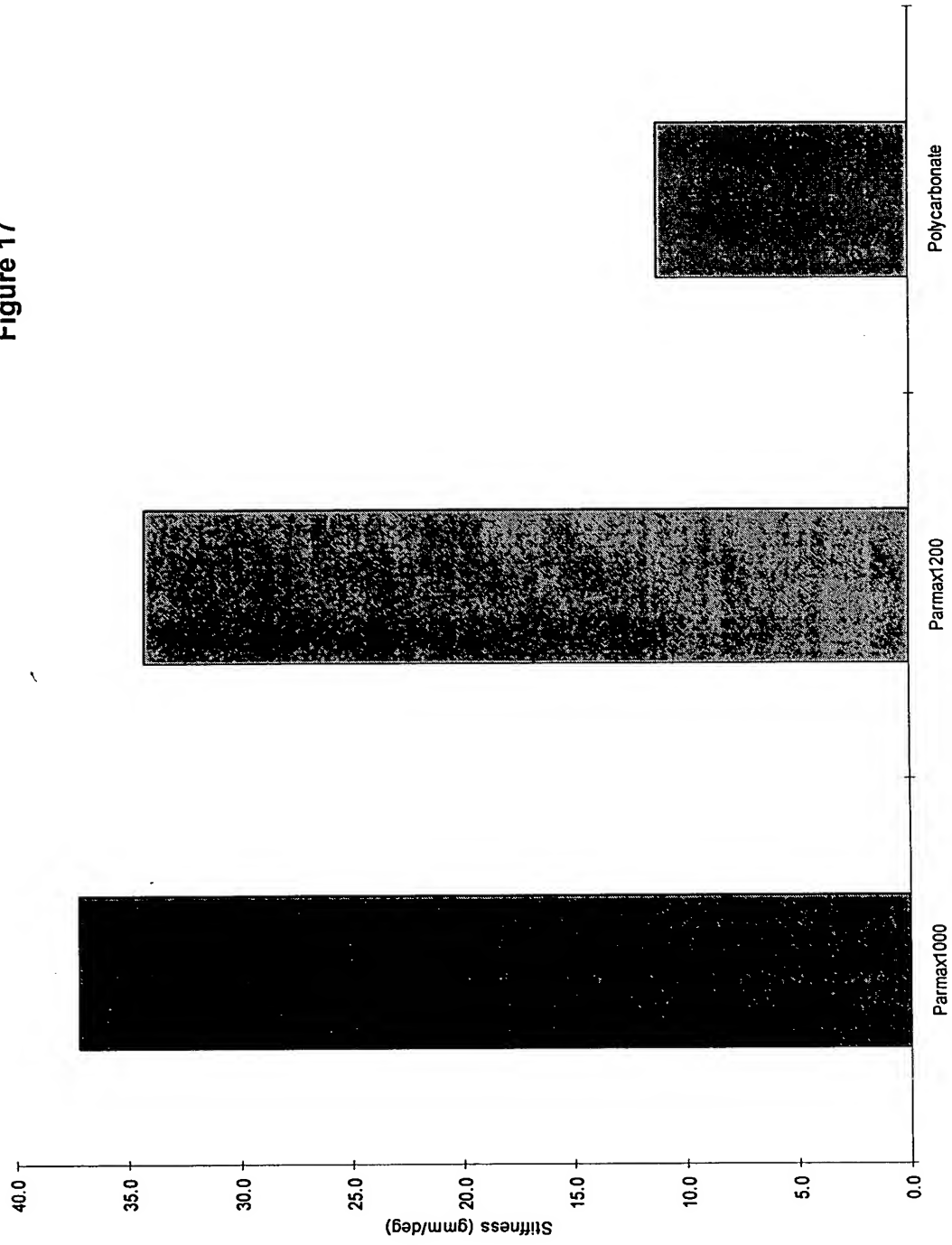


Figure 16



Stiffness

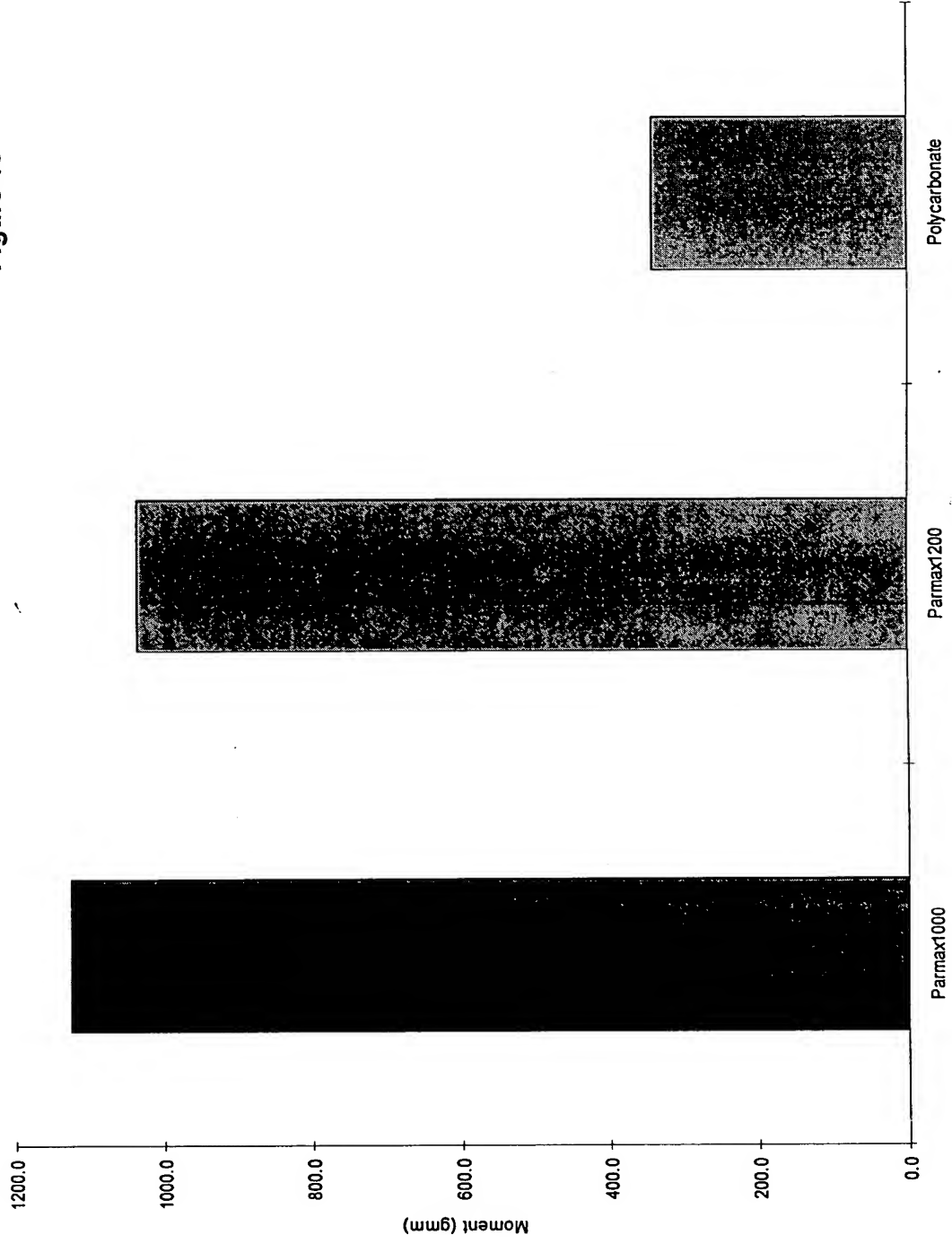
Figure 17





Ultimate Moment

Figure 18



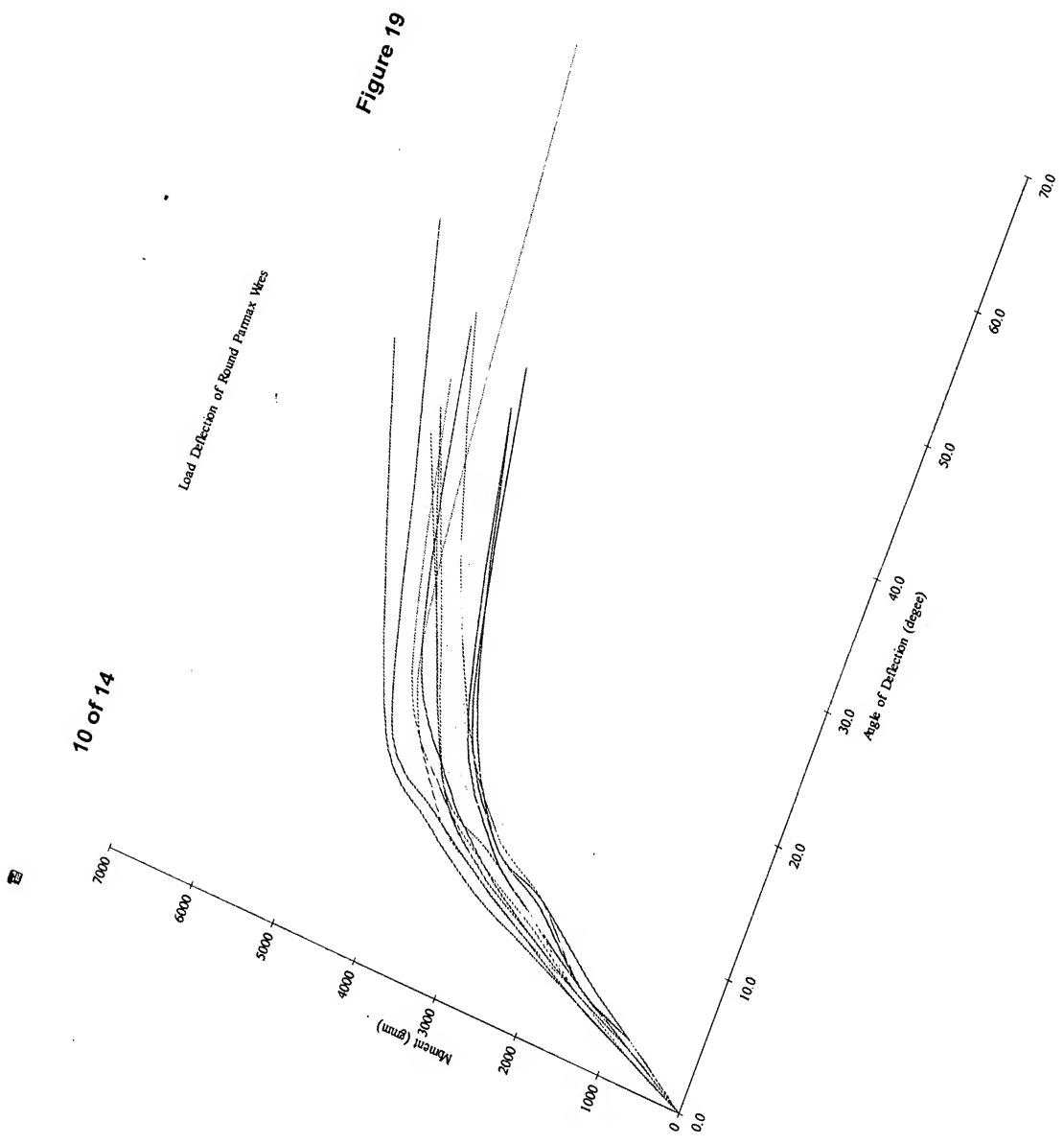


Figure 20

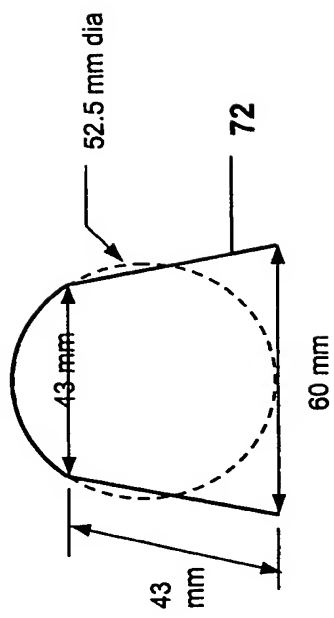


Figure 27

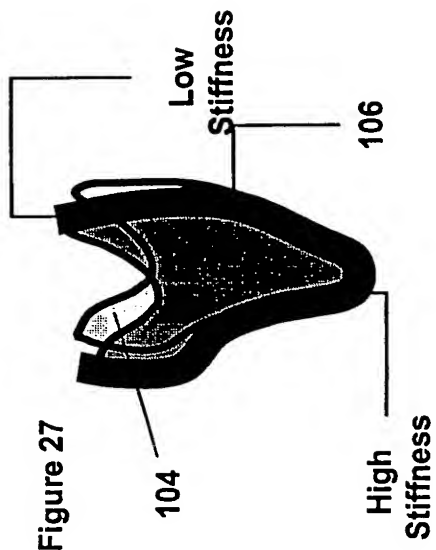
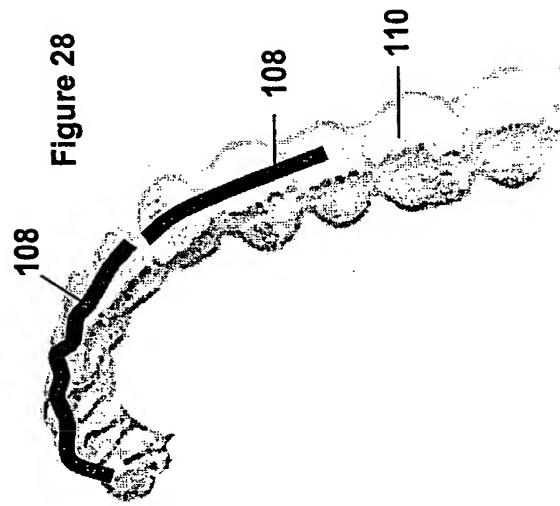


Figure 28



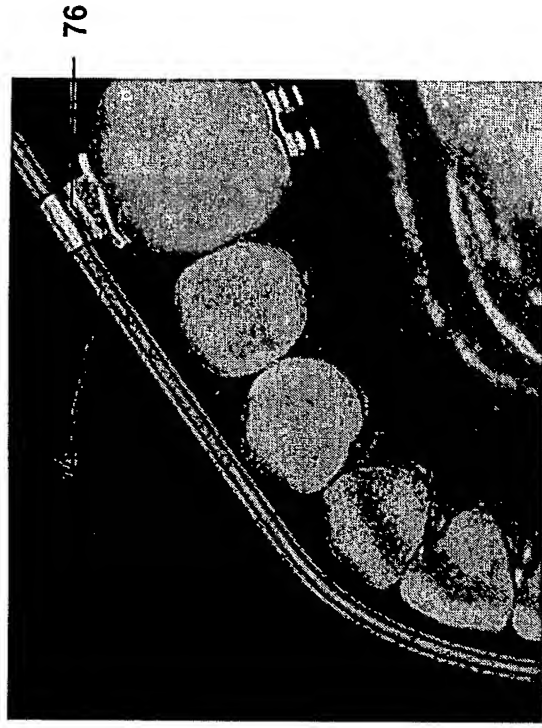


Figure 21a

Figure 21b

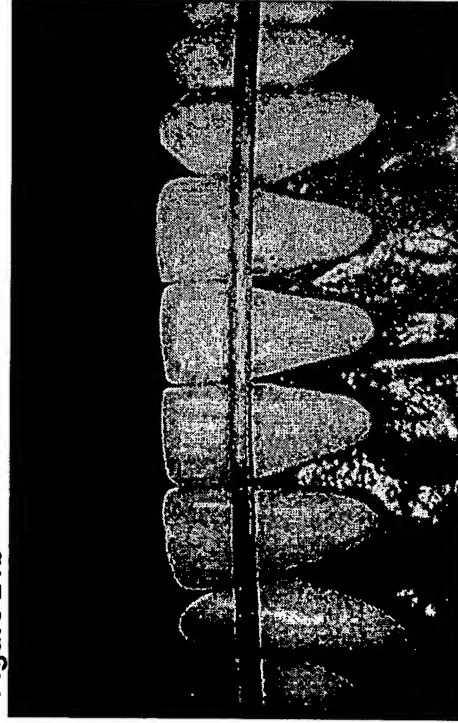


Figure 21c



Figure 22

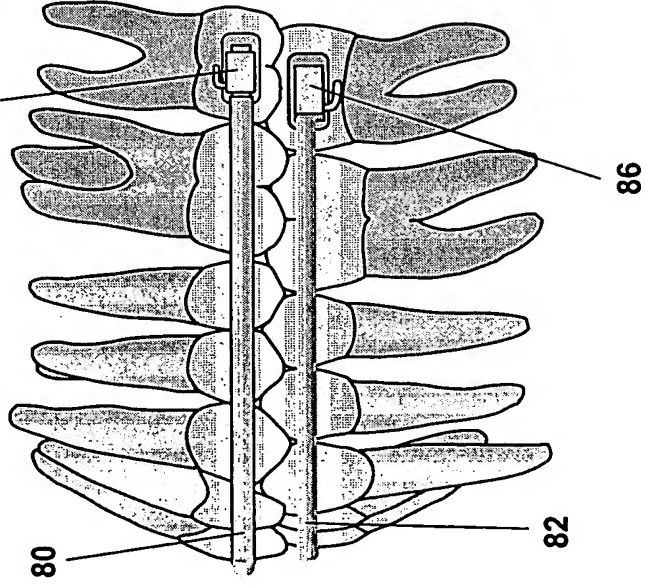


Figure 23

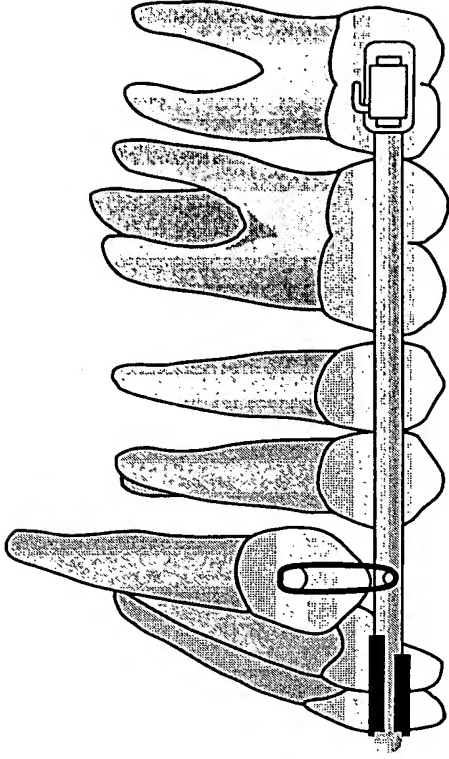
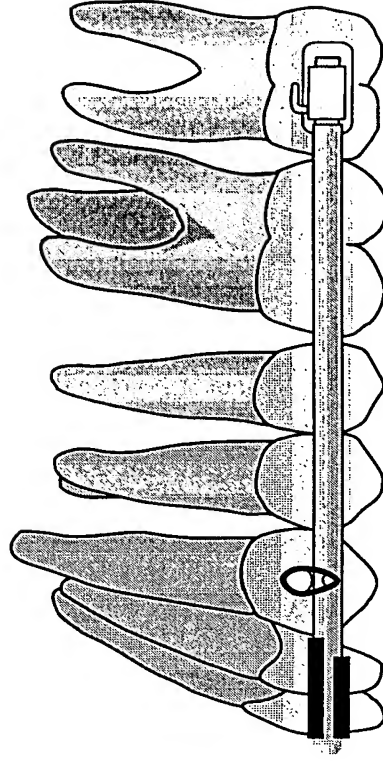


Figure 24



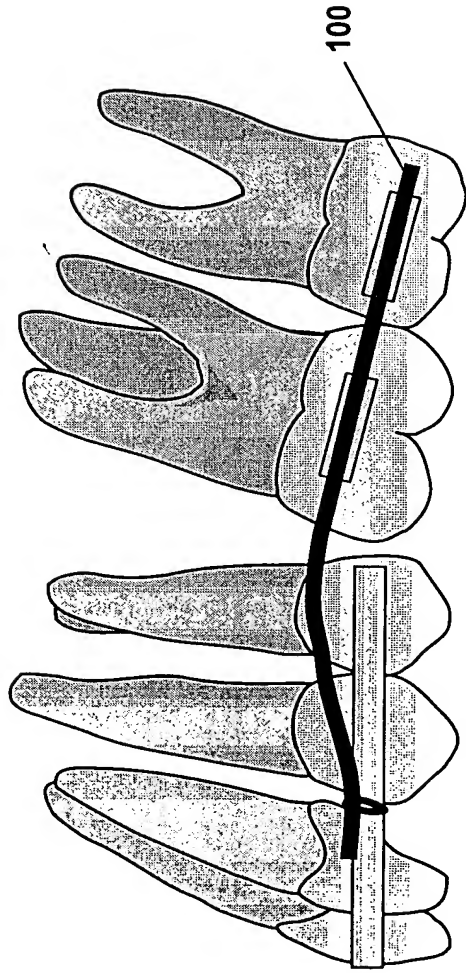


Figure 25

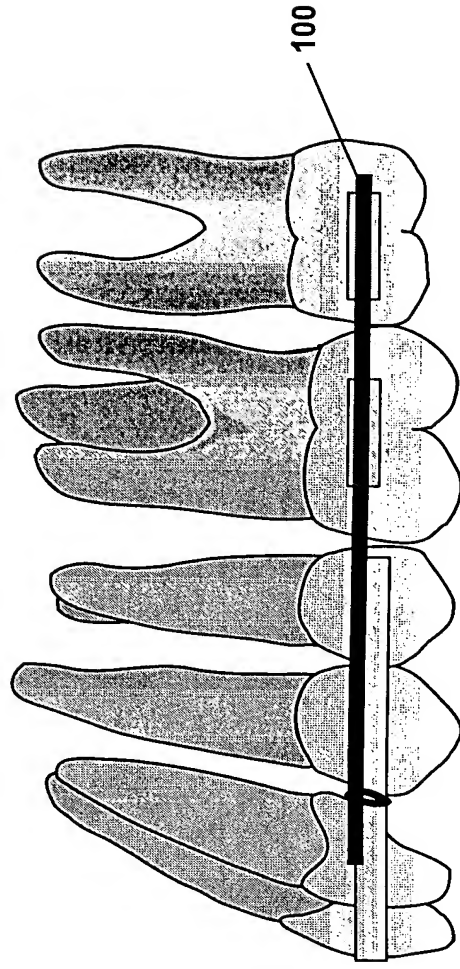


Figure 26